

# **GASTROENTEROLOGY RESIDENT CURRICULUM**

## **I. Introduction/Goals**

1. The educational curriculum in the GI Element will offer residents/students the opportunity to become familiar with common GI disorders. The resident/student will be expected to develop a differential diagnosis, an evaluation, and a therapeutic plan for various patient complaints.
2. Several types of educational experiences will be offered: procedural familiarization, didactic instruction, clinical patient contact (inpatient and outpatient), and clinical research opportunities if desired.
3. Through these educational experiences and self-directed teaching, the resident/student will be expected to understand the basic pathophysiology and treatment of the following conditions:
  - GERD, Barrett's esophagus
  - NSAID toxicity
  - Inflammatory bowel disease
  - Irritable bowel syndrome
  - Chronic/acute pancreatitis
  - Dysphagia
  - Dyspepsia
  - Chronic diarrhea
  - Nausea/vomiting, gastroparesis
  - Colon CA (including screening)
  - Peptic ulcer disease, H. pylori
  - Chronic viral hepatitis
  - Hemochromatosis
  - Alcoholic liver disease
  - Steatohepatitis
  - Management of portal hypertension
  - Acute/chronic GI bleeding
  - Malabsorption (sprue, bacterial overgrowth)
  - Biliary obstruction

## **II. Methods**

### **1. Procedural Familiarization**

#### *a. GOALS*

- To expose each resident to the proper techniques of performing flexible sigmoidoscopy. Though residents are expected to perform these exams through the Internal Medicine screening program, some opportunities will be provided for the residents to perform sigmoidoscopies within the GI Clinic.
- To expose each resident/student to the spectrum of GI procedures in order to provide an understanding of the indications, contraindications, complications, and diagnostic/therapeutic values of such procedures.

#### *b. METHODS*

- Residents will have the opportunity to be trained by a GI provider and to perform sigmoidoscopies while on their GI rotation; residents will also be able to perform sigmoidoscopies under the guidance of Internal Medicine staff while on outpatient medicine rotations. The number of opportunities during the GI rotation will be dependent upon patient load, inpatient consultative duties, and personal non-GI commitments.
- Videotapes and textbooks will be available to help instruct the resident on proper procedure performance and on normal/abnormal findings (in addition to direct instruction from GI staff).

- Hands-on training will be provided such that the resident should be able to competently and independently perform 60-cm sigmoidoscopies by the end of residency. Though competency will be assessed on an individual basis, it is expected that the resident will complete at least 30 sigmoidoscopies if he/she seeks credentialing for this procedure.
- Scheduling of sigmoidoscopy training will in part depend on the initiative of the resident. Dedicated time (apart from standard GI procedure times) can be provided if special arrangements are made.
- Residents/students will be encouraged to observe various GI procedures to include colonoscopy, upper endoscopy, ERCP, and esophageal manometry. Diagnostic and therapeutic roles of these procedures will be defined so that a thorough understanding of procedural capabilities and limitations is achieved.

## 2. Didactic Instruction

### *a. GOAL*

- To broaden the fund of knowledge of the resident/student in regards to GI disorders

### *b. METHODS*

- Didactic teaching will be provided throughout the rotation with morning report cases, noon conference lectures, Grand Rounds, and GI/Surgery/Radiology conference. Approximately 6-8 noon conference lectures and 2-3 Grand Rounds will be sponsored/arranged by the GI faculty. Topics presented will be according to the Internal Medicine core curriculum lecture series.
- The resident/student will be given the opportunity to become familiar with GI radiology interpretation by reviewing case-related films with the GI staff and by attending the weekly GI/Surgery/Radiology conference.
- The resident/student may make use of staff textbooks and files for reference, and GI slidesets or other teaching aids may become available. On-line references will also be available, in particular to locate current management guidelines on various GI disorders.
- Teaching related to cases seen in clinic or inpatient consultation will occur on a daily basis. In addition, informal lectures on various GI disorders will be provided as time allows. The resident/student may be expected to provide a brief "lecture" on selected topics, though most lectures will be provided by the staff.

## 3. Clinical Patient Contact

### *a. GOAL*

- To expose the resident/student to patients with both common and uncommon GI disorders in inpatient and outpatient arenas.

### *b. METHODS*

- Residents/students will evaluate patients for whom inpatient GI consultation has been requested. The patient's clinical history and physical/laboratory/radiographic findings will be presented to the staff. The differential diagnosis will be generated, and a diagnostic and

therapeutic plan will be discussed. The resident/student will also follow these patients periodically throughout their hospitalization as deemed necessary.

- The resident/student will also evaluate selected new patients in the clinic setting; after an initial evaluation similar to that of inpatient consults, management of the outpatient will be discussed with the staff. The resident/student may periodically be asked to evaluate follow-up patients or to observe the staff perform such duties when that patient offers an unique teaching opportunity.
- Residents/students are expected to participate with inpatient consultations and rounding on standard duty days. Furthermore, residents/students are expected to participate in outpatient GI clinics to further their understanding of common disorders. It is understood that residents may have their own medicine clinics or other assigned duties, but residents/students should participate fully with daily GI clinic functions. Time “off” from the GI rotation should be pre-arranged with the faculty.

#### 4. Clinical Research

##### *a. GOAL*

- To provide an opportunity for residents to participate in clinical research.

##### *b. METHODS*

- Residents will be encouraged to participate in clinical research. Though they may assist with ongoing protocols, they will be encouraged to design their own project with assistance/supervision provided by the GI staff. The GI staff will be responsible to assure that the project involves a valid clinical question, that the project is scientifically and ethically feasible, and that the project can be reasonably completed by a motivated resident. Standard IRB guidelines will apply.
- Case presentations (oral or poster presentations at society meetings, journal publications, etc.) may also be available for residents. The GI staff will assist in such preparations.

### **III. Critique**

Midway and at the end of the GI rotation, an opportunity for constructive criticism (or praise) will be offered. The GI staff will evaluate the performance of the resident/student, but the resident/student will be asked to evaluate the GI staff and the overall educational experience as well.

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